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Federal Communications Commission
Washington, D.C. 20554

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**FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY**

In the Matter of)

Compatibility Between Cable Systems)
And Consumer Electronics Equipment)

PP Docket No. 00-67

COMMENTS OF
THE NATIONAL ASSOCIATION OF BROADCASTERS
AND
THE ASSOCIATION FOR MAXIMUM SERVICE TELEVISION, INC.

**NATIONAL ASSOCIATION OF
BROADCASTERS**

**ASSOCIATION FOR MAXIMUM
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TABLE OF CONTENTS

Executive Summary	i
I. INTRODUCTION	1
II. THE FCC MUST IMMEDIATELY MANDATE IEEE 1394 DIGITAL CONNECTION FOR ALL DTV SETS AND SET-TOP BOXES	6
A. The FCC Has Authority to Mandate Standards	7
B. IEEE 1394	9
C. IEEE 1394 Copy Protection	10
III. THE FCC MUST FORCE EACH STEP ALONG THE PATH TO DEPLOYMENT OF DIRECT CONNECTION (CABLE-READY) DTV SETS	11
A. RF Interconnection	12
B. Program and System Information Protocol (PSIP).....	14
C. Copy Protection	14
D. Labeling	15
IV. CONCLUSION	15

EXECUTIVE SUMMARY

The National Association of Broadcasters (NAB) and the Association for Maximum Service Television (MSTV) jointly file these comments regarding the issues raised in the Commission's *Notice* seeking "to resolve outstanding issues regarding the compatibility of cable television systems, digital television receivers, set-top boxes, and other equipment used by consumers." While the *Notice* recites that the Commission has "encouraged and facilitated" negotiations between the cable and consumer electronic industries, today, three years after the DTV transition was initiated by the FCC, there is *no* DTV/cable inter-operable product. That means, there is no DTV receiver available on the market that will work with digital cable. Nor is there any prospect that there will be DTV/cable inter-operable product in the short or medium term.

Today, consumers who subscribe to cable (67 percent of all TV households) *cannot* access digital cable services through a DTV receiver. Today (and for the next year or two), DTV sets that consumers might buy *will never* work properly with digital cable. There should be no reluctance on the Commission's part to step in for the benefit of consumers. Inter-operable products are *vital* to the DTV transition.

For more than ten years, NAB and MSTV have urged the Commission to mandate a resolution to the DTV/cable inter-operability problems so that consumers interested in receiving DTV over cable and in connecting DTV receivers with a range of digital peripherals will be able to do so. The Commission has put off dealing with this issue.

Moreover, the digital "cable ready" solution this *Notice* focuses on is the *subject only of incomplete agreements, unfinished standards and no mandate for product*. The Commission

must require that the three basic steps in product development be completed for consumer digital “cable ready” DTV equipment to be available to consumers as soon as possible. These steps are:

- 1) a complete agreement must be reached on each parameter of a digital “cable ready” receiver;
- 2) precise standards must be established that enable each industry to produce digital product that is inter-operable with the other’s product; and 3) these precise standards must be implemented in digital “cable ready” products.

Each of these steps must be completed for each of the four outstanding major compatibility issues identified in the *Notice* (RF interconnection, program system information protocol (PSIP), copy protection and labeling of equipment). The cable and consumer electronics industries have made varying degrees of progress toward completion of the three basic steps (agree, define and implement) – but for none of the four issues have they completed all three steps.

Thus, the Commission must *immediately* mandate standards (both for the near term and the long term) in order to solve the problems of getting a DTV signal through a cable system to the consumer. Specifically, the FCC must *immediately* mandate IEEE 1394/5C interfaces for all DTV sets and set-top boxes (STB) for today’s STB environment. It must then proceed to force *immediate* completion of the agreements and standards for direct connection of cable systems with DTV sets (digital “cable ready”) and then mandate that direct connection DTV receivers be built to those standards. Perhaps then, the DTV transition that Congress wants completed in 2006 can begin in earnest.

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I. INTRODUCTION

The FCC has “reluctantly” issued a *Notice of Proposed Rule Making* on cable /DTV inter-operability seeking “to resolve outstanding issues regarding the compatibility of cable television systems, digital television receivers, set-top boxes, and other equipment used by consumers”¹ The National Association of Broadcasters (NAB)² and the Association For Maximum Service Television, Inc. (MSTV)³ hereby comment on the digital inter-operability issues that *should have been resolved and mandated years ago by the FCC*. It disappoints us, and should dismay policymakers and consumer advocates, that the FCC is today, at long last, still reluctant to take action in the

¹ *Notice of Proposed Rule Making*, In the Matter of Compatibility Between Cable Systems and Consumer Electronics Equipment, PP Docket No. 00-67, at ¶ 1 (released April 14, 2000) [hereinafter *Notice*].

² NAB is a nonprofit incorporated association of radio and television stations and broadcasting networks. NAB serves and represents the American broadcasting industry.

³ MSTV is a nonprofit trade association of local broadcast television stations committed to achieving and maintaining the highest technical quality for the local broadcast system.

arena of digital inter-operability. The FCC's public pronouncements that it would rely on marketplace forces to ensure consumers' ease of use and access to new digital content have had disastrous results.

Today, three years after the DTV transition was initiated by the FCC, there is *no* DTV/cable inter-operable product. That means, there is no DTV receiver available on the market that will work with digital cable. Nor is there any but the most remote prospect that there will be DTV/cable inter-operable product in the short or medium term. Today, three years after the Commission ordered broadcasters to begin airing DTV signals and the Congress set deadlines for an early end to the DTV transition and recovery of analog spectrum,⁴ consumers who subscribe to cable (67 percent of all TV households) *cannot* access digital cable services through a DTV receiver. Today (and for the next year or two), DTV sets that consumers might buy *will never* work properly with digital cable. There should be no reluctance on the Commission's part to step in for the benefit of consumers.

The *Notice* recites that the Commission has "encouraged and facilitated" the negotiations (on inter-operable digital products) between the cable and consumer electronics industries, "in the hope and belief that comprehensive market-driven solutions were attainable and would be superior to a regulatory approach."⁵ The *Notice* goes on to

⁴ Eighty-five percent of the television households in a market must be able to receive all local DTV transmissions, either over-the-air or through a cable or satellite service provider, before NTSC spectrum in that market may be reclaimed by the Government, which Congress wants to accomplish by 2006. *Memorandum Opinion and Order on Reconsideration of the Fifth Report and Order*, MM Docket 87-268, adopted February 17, 1998 at fn. 142.

⁵ *Notice* at ¶ 3.

say that “[w]e are concerned that further delay in resolving these [two critical unresolved matters] could begin to have deleterious effects on the deployment of a universe of products and services that will benefit the American public and, indeed, delay the implementation of DTV.”⁶ In fact, inter-operable products are *vital* to the DTV transition.

For more than ten years, NAB and MSTV have urged the Commission to force or mandate a resolution to the DTV/cable inter-operability problems so that consumers interested in receiving DTV over cable and in connecting DTV receivers with a range of digital peripherals will be able to do so, thereby moving the DTV transition towards completion.⁷ The Commission has put off dealing with this issue, first promising to issue

⁶ *Id.*

⁷ See, e.g., Joint Broadcaster Comments, *In re Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service*, MM Docket 87-268, at 18-20 (Nov. 30, 1988); Joint Broadcaster Comments, MM Docket 87-268, at 38-39 (Nov. 20, 1995); Joint Broadcaster Comments, MM Docket No. 87-268, at 19-21 (Jan. 22, 1996); Joint Broadcaster Comments, MM Docket No. 87-268, at 26-27 (July 11, 1996); Comments of MSTV, *Notice of Proposed Rulemaking, In re Carriage of the Transmissions of Digital Television Broadcast Stations, Amendment of Part 76 of the Commission's Rules*, CS Docket No. 98-120 (Oct. 13, 1998); Comments of NAB in CS Docket No. 98-120 (Oct. 13, 1998); Reply Comments of MSTV in CS Docket No. 98-120 (Dec. 22, 1998); Reply Comments of NAB in CS Docket No. 98-120 (Dec. 22, 1998); Comments of MSTV in Partial Support of the Petition for Reconsideration of the Consumer Electronics Manufacturers Association and In Partial Opposition to the Petitions for Reconsideration of Time Warner Entertainment Company and the National Cable Television Association Inc., CS Docket No. 97-80 (Sept. 23, 1998); *Ex Parte* Notice of MSTV in CS Docket No. 97-80 (May 21, 1998); *Ex Parte* Notice of MSTV and NAB in CS Docket No. 97-80 (May 28, 1998); Letter From Victor Tawil, MSTV and Henry L. Baumann, NAB, to William E. Kennard, Chairman, FCC in CS Docket No. 98-120 (June 4, 1998); Letter from Victor Tawil, MSTV, to William E. Kennard, Chairman, FCC in CS Docket No. 98-120 (Sept. 16, 1998) (urging completion of 1394 specifications by the November deadline and reminding the Commission that 1394 is just one of many specifications that need to be resolved); Letter from Margita E. White, MSTV, and Edward O. Fritts, NAB, to William E. Kennard, Chairman, FCC in CS Docket No. 98-120 (November 10, 1998) (urging FCC oversight over the completion of standards-setting and the implementation of STV-receiver inter-operability); Statement of

a rulemaking in 1994⁸, then delaying, and then in 1998 abdicating its regulatory authority for a largely ineffectual cajoling role.⁹

Having reduced its role in the digital inter-operability saga to little more than monitoring industry progress, in 1998 the Commission focused on the IEEE 1394 interface. In response to weak and sporadic FCC pressure on the interface issue, cable and set manufacturers have sent letters *promising* to take action, *assuring* that resolution on the interface standard was in the offing, and assuring even that such *product* was close at hand.¹⁰ The Commission even held a hearing on DTV inter-operability in May

Victor Tawil, MSTV, May 20 FCC Roundtable on DTV Compatibility with Cable and Other Video Distribution Services (May 20, 1999); Statement of Lynn Claudy, NAB, May 20 FCC Roundtable on DTV Compatibility with Cable and Other Video Distribution Services (May 20, 1999); Letter from Margita E. White, MSTV, to William E. Kennard, Chairman FCC in CS Docket No. 98-120 (July 22, 1999) (noting that the promises to the FCC in the wake of the Compatibility Roundtable fell far short of the FCC's expectations); MSTV Report on DTV Implementation, CS Docket No. 98-120 (Oct. 8, 1999) (cataloging the inter-operability problems); Letter from Margita E. White to the Hon. W.J. Tauzin, Chairman, House Subcommittee on Telecommunications, Trade and Consumer Protection (Dec. 2, 1999); Letter from Edward O. Fritts, NAB, and Margita E. White, MSTV to Commissioner Ness (Dec. 20, 1999) (commenting on Dec. 10 inter-operability meeting and the unending inter-operability deliberations); Letter from Margita E. White to William E. Kennard, Chairman FCC (March 6, 2000) (expressing disappointment with the NCTA-CEA agreement). NAB and MSTV even took advantage of a Senate hearing on the transition to DTV to zero-in on and put front and center the cable/DTV inter-operability problem and to demand resolution. *See also The Transition to High Definition Television: Hearings Before the Senate Comm. on Commerce, Science and Transp.*, 105 Cong. 2d Sess. (July 8, 1998) (statement of Gregory M. Schmidt, Vice President, LIN Television Corporation).

⁸ *See* Implementation of Section 17 of the Cable Television Consumer Protection and Competition Act of 1992, First Report and Order, ET Docket No. 93-7, 9 FCC Rcd. 1981, 2005 (1994).

⁹ *See* Letter from William E. Kennard, Chairman, FCC to Decker Anstrom and Gary Shapiro (August 18, 1998).

¹⁰ Although the Commission appeared firm in its urgings that the cable and consumer electronics industries resolve these issues, it accepted half-loaf responses. *See*

of 1999, where there was a virtually unanimous chorus of cable, manufacturing, content and broadcast witnesses endorsing the IEEE 1394/5C digital interface as the practical solution to cable/DTV inter-operability for today's set-top box environment. And, still, in May 2000, we have no IEEE 1394 DTV product.

The Commission lauds the cable and consumer electronics industries for having attempted agreement on specifications for a cable-ready set,¹¹ even before they have deployed IEEE 1394 interfaces for today's set-top box environment, but the digital "cable-ready" solution this *Notice* focuses on is the subject *only of incomplete agreements, unfinished standards and no mandate for product*. The Commission overstates the degree to which progress has really been made on longer-term inter-operability solutions (even while the immediate need for IEEE 1394 product goes unmet). It should take immediate steps to ensure that there is increased public comment and participation in the formulation of a cable-ready solution, as well as a mandated timetable for completion of cable-ready specifications.

Thus, NAB and MSTV, after years of similar demands and no results, again call on the FCC to take off its blinders, realize that its inaction has directly contributed to the sorry array of DTV consumer equipment available today, and mandate strong inter-

Letter from Gary, Shapiro, CEMA to William E. Kennard, Chairman, FCC (October 30, 1998) (claiming victory for the digital interface, IEEE 1394, but leaving the required copy protection piece undone. The agreement on all necessary components including copy protection, IEEE 1394 interface is still incomplete. *See* Letter from William E. Kennard, Chairman, FCC to Decker Anstrom, NCTA and Gary Shapiro, CEMA (August 13, 1998); Letter from Decker Anstrom, NCTA to Kennard, Chairman, FCC (August 26, 1998); Letter from Gary Shapiro, CEMA to William E. Kennard, Chairman, FCC (September 10, 1998); Letter from Decker Anstrom, NCTA and Gary Shapiro, CEMA to William E. Kennard, Chairman, FCC (October 30, 1998). The FCC continues to applaud half-measures while month after month of the DTV transition go by.

¹¹ *Notice* at ¶ 12.

operability standards. As we discuss below, the FCC must *immediately* mandate IEEE 1394/5C interfaces for all DTV sets and set-top boxes for today's set-top box environment. It must then proceed to force *immediate* completion of the agreements and standards for direct connection of cable systems with DTV sets (digital "cable ready") and then mandate that such direct connection DTV receivers be built to these standards.

Even then, it will likely be *after* the 2001 holiday selling season, some time in 2002, that such "cable-ready" DTV sets will be on store shelves. If the FCC immediately mandates IEEE 1394/5C interfaces for all DTV sets (as of summer 2001), at least there will be an end to the cable-incompatible DTV sets as of that date (four years after the DTV transition began) and in time for the 2001 holiday selling season. Perhaps then, the DTV transition that Congress wants completed in 2006 can begin in earnest.¹²

II. THE FCC MUST IMMEDIATELY MANDATE IEEE 1394 DIGITAL CONNECTION FOR ALL DTV SETS AND SET-TOP BOXES.

IEEE 1394 is immediately needed for cable consumers to be able to get HDTV signals, cable and broadcast, from their digital cable set-top box to their DTV set. IEEE 1394 is also needed on all DTV product so that there will be a consumer-friendly, ubiquitous connector for all digital television devices, giving consumers the much-needed certainty that the digital sets and other digital products they buy will work with each

¹² NAB, in its comments on the DTV Biennial Review filed last week, calls for the FCC to mandate that *every* TV set sold, analog or digital, be equipped with a DTV tuner, which NAB believes is the kind of dramatic action necessary to get the DTV transition back on the course set by Congress and the Commission. *See* NAB Comments, MM Docket No. 00-39, filed May 17, 2000. MSTV joins with NAB in calling for this action.

other. The need for the IEEE 1394 connection was obvious as many as three years ago. The Commission relied on the marketplace to ensure that the interface was installed in consumer hardware with all deliberate speed. But that did not happen. It did not happen because agreement on all the necessary layers of the IEEE 1394 specification has been held up by quarrels among content providers, the cable industry, and receiver manufacturers over copy protection technologies and licensing terms.¹³ Consumers do not seem to be clamoring for IEEE 1394 connections; they simply are not buying digital receivers because of the premature obsolescence and limited utility built into those receivers. This, then is the state of affairs. The market has not worked to speed provision of a short-term inter-operability solution and the Commission has failed to step into the vacuum.

A. The FCC Has Authority to Mandate Standards.

The *Notice* asks whether certain portions of Section 624A of the Communications Act, 47 U.S.C. §544A, prevent the Commission from adopting digital inter-operability standards such as the ones proposed herein.¹⁴ They do not. Section 624A is directed at the problems of analog cable inter-operability. The provisions the *Notice* references (Sections 544A(a)(4), and (c)(2)(D)) were added by Section 301(f) of the Telecommunications Act of 1996, otherwise known as the Eshoo Amendment. This Amendment was directed at the Commission's ongoing rulemaking on analog cable

¹³ See *Notice* at ¶ 20. See also Letter from Robert S. Schwartz to Magalie R. Salas, Federal Communications Commission, Office of the Secretary (Feb. 2, 2000) in CS Docket No. 97-80; Letter from Richard R. Green to Magalie R. Salas, Federal Communications Commission, Office of the Secretary (Feb. 16, 2000), in CS Docket 97-80.

¹⁴ See *Notice* at ¶ 9.

equipment compatibility and, specifically, at the possible impact of the FCC's 1994 proposal for a decoder interface standard on home automation equipment and services.¹⁵ As the Commission has already found in another proceeding, the amended language of Section 624A, by its terms, applies only to rules required or prescribed by Section 624A (that is, to the analog cable compatibility rules).¹⁶ Even if Section 624A did govern the Commission's consideration of a mandatory IEEE 1394 interface standard, mandating such a standard would easily pass the test imposed by that Section. There appears to be a consensus that a IEEE 1394 connection is the minimum degree of common design necessary to ensure compatibility and, rather than impairing competition among other equipment features, the connection actually allows competition in other features to flourish.¹⁷ That is, once the basic connection has been resolved, equipment manufacturers can differentiate their products based on other offerings. Furthermore, the IEEE 1394 connection does not in any way impair the specific functions enumerated in 47 U.S.C. § 544a(c)(1)(B) (recording off-channel, taping consecutively on two different channels, and picture-in-picture).

¹⁵ See, e.g., Statement of Representative Eshoo, 142 Cong. Rec. 1145, 1161 (Feb. 1, 1996). See also Communications Act of 1995, H.R. Rep. No. 104-204, 104th Cong., 1st Sess. (111) 1996.

¹⁶ *Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices*, CS Docket No. 97-80, Report and Order, 13 F.C.C.R. 14775, 14804 (1998); Order on Reconsideration, 14 F.C.C.R. 7596 (1998), *appeal pending sub. nom. General Instrument Corporation v. FCC*, No. 98-1420, (D.C. Cir.). MSTV and NAB were active participants in this docket, see, e.g., Comments of MSTV in Partial Support of the Petition for Reconsideration of the Consumer Electronics Manufacturers Association and In Partial Opposition to the Petitions for Reconsideration of Time Warner Entertainment Company and the National Cable Television Association Inc., CS Docket No. 97-80 (Sept. 23, 1998), and MSTV intervened on the side of the FCC in the appeal.

¹⁷ One could ask for significantly more, including RF and analog baseband connections.

B. IEEE 1394

As discussed above, IEEE 1394 has long been the acknowledged immediate solution to get DTV signals (cable *and* broadcast, particularly HDTV signals) from the cable set-top box into DTV sets. Without readily available IEEE 1394 connections, the DTV transition is stopped in its tracks at the consumer end because the 67 percent of TV households that are cable subscribers have little or no incentive to buy a DTV set. And, of course, without consumers purchasing DTV sets in large numbers there will be no DTV transition.¹⁸ Any consumer that has purchased a DTV set thus far, and any that purchases one currently on the shelves, owns or will own an expensive piece of equipment that *will never work properly with cable*.

While direct connection-to-cable (digital “cable-ready”) DTV sets are a desirable consumer goal, they are far away from being offered in the marketplace. Even if digital cable-ready sets were available today, consumers would still want to be able to connect those sets to other digital devices, like digital VCRs, through a digital pipe. And, importantly, as a matter of practical reality, set-top boxes will be used by consumers now and well into the future. The IEEE 1394 connector is necessary for the set-top box DTV environment today, and the digital inter-connected environment of tomorrow. The cable industry *has* standardized IEEE 1394/5C and IEEE 1394-equipped set-top boxes and some MSOs are expected to deploy them later this year. The FCC must act immediately to mandate the IEEE 1394 interface on all DTV receivers, and all digital set-top boxes or

¹⁸ We recognize that consumers can buy digital decoders in order to receive DTV signals on analog sets, but it is the viewing of DTV signals on DTV receivers in full digital quality that is expected to give consumers the greatest incentive to make the digital conversion.

DTV equipment that is not inter-operable will continue to be offered while the DTV transition continues to languish.

C. IEEE 1394 Copy Protection

While the affected industries theoretically settled on IEEE 1394 as the baseband digital interconnection some time ago,¹⁹ it appears that deployment of IEEE 1394 product cannot occur without standardized copy protection technology for the IEEE 1394 link.²⁰ And, while at the May 1999 FCC hearing on DTV inter-operability, there was a near unanimous agreement that the “5C” copy protection technology was certain to be *the* copy protection method to be used,²¹ the lack of standardization of 5C by the consumer electronics industry as well as concerns of copyright owners over licensing terms has stymied the addition of 5C to IEEE 1394 product. And another year has passed.

NAB and MSTV have long said just “get it done.” We say so again. The FCC must step in to force action and mandate standards so inter-operable product will be built. We do urge the FCC, however, to require that the owners of any copy protection technology must not, in licensing that technology, adopt a blanket ban against use in any

¹⁹ See Letter from CEA and NCTA to William E. Kennard, Chairman, FCC (October 30, 1998).

²⁰ In fact, NAB and MSTV believe that the lack of certainty that IEEE 1394 itself would in fact be the anointed connector has been as much to blame for the non-implementation of IEEE 1394 as the missing copy protection piece. For any technical standard to be confidently deployed in products, the FCC blessing or mandate seems necessary. Without it, manufacturers cannot be sure enough to devote their product production lines to an “expected” winner technology.

²¹ *DTV Inter-operability Roundtable: Hearings Before the Federal Communications Commission* (May 20, 1999).

particular distribution environments.²² The same applies to the use of 5C in the cable-ready, direct connection environment, where 5C, among other unfinished issues, is dragging out completion of mere agreements. Actual standards, much less implementation of digital "cable-ready" DTV sets are still out of reach. In the area of copy protection -- a critical ingredient of the digital interface between set-top boxes and DTV receivers -- the FCC has relied on endless industry negotiations, with no real stick to force a conclusion in the public interest. It has also naively assumed that agreements will instantly mean products on the store shelves. Nothing could be farther from the truth.

III. THE FCC MUST FORCE EACH STEP ALONG THE PATH TO DEPLOYMENT OF DIRECT CONNECTION (CABLE-READY) DTV SETS.

The only way to provide consumers with the assurance that the DTV sets they may buy will work with cable (and the only way to reach the 85 percent DTV receiver penetration mark even close to the 2006 deadline) is for the Commission to mandate cable inter-operability through immediate deployment of IEEE 1394 for the set-top box environment, as discussed above, and by defining and requiring all components of the digital "cable ready" direct connection alternative.

The Commission must require that the three basic steps in product development be completed for consumer digital "cable ready" DTV equipment to be available to consumers as soon as possible. These steps are: 1) a complete agreement must be

²² See Letter from Margita E. White, MSTV to Hon. W.J. Tauzin, Chairman, House Subcommittee on Telecommunications, Trade and Consumer Protection (December 2, 1999).

reached on each parameter of a digital “cable ready” receiver; 2) precise standards must be established that enable each industry to produce digital product that is inter-operable with the other’s product; and 3) these precise standards must be implemented in digital “cable ready” products.

Each of these steps must be completed for each of the four major compatibility issues identified in the *Notice* (RF interconnection, program system information protocol (PSIP), copy protection and labeling of equipment).²³ The cable and consumer electronics industries have made varying degrees of progress toward completion of the three basic steps (agree, define and implement) – but for none of the four issues have they completed all three steps.

One of the shadows cast on the entire industry negotiation process on which the FCC has utterly relied is that the process has been closed to broadcasters and other affected parties. The cable, equipment manufacturing and content creating industries all have an interest in seeing progress made on digital inter-operability, but none has the pressing interest that broadcasters (and consumers) have in making DTV take off quickly. The Commission, acting in the public interest and consistently with its DTV policy, must take steps to make the inter-operability negotiations more transparent to the public and hold the relevant industries to greater accountability.²⁴

A. RF Interconnection

With regard to the RF interconnection, the agreement announced by CEA and NCTA on February 22, 2000 outlines the critical features of the hardware connection

²³ *Notice* at ¶ 3.

between a cable system and a digital “cable ready” receiver.²⁵ Thus, with respect to the RF interconnection, the two industries have completed step one (the agreement phase) in the process of bringing digital “cable ready” receivers to market. Unfortunately, not only have they not completed step two (the standards definition phase), but they have created two *separate* RF interconnection standards for their respective industries. At least in draft form, these two standards are not fully compatible with each other. If the final versions of these two standards are not made compatible, the rollout of digital “cable ready” consumer receivers will be further delayed.

To solve the problem of potentially warring and incomplete standards, the Commission must adopt a single RF interconnection standard for digital “cable ready” receivers, just as it did for analog cable ready equipment.²⁶ In principle, it makes no difference to broadcasters whether the Commission adopts the CEA (EIA) version of this standard or the NCTA (SCTE) version. But the Commission must mandate a single version for use by DTV set manufacturers and cable equipment manufacturers in order to ensure compatibility. As discussed above, the Commission should have no doubts on its authority to take this action.

²⁴ See Joint Broadcasters Comments, MM Docket No. 00-39 (filed May 17, 2000) at 27, calling for public comment.

²⁵ See Letter from Robert Sachs, President and CEO, National Cable Television Association, and Gary Shapiro, President and CEO, Consumer Electronics Association, to William E. Kennard, Chairman, Federal Communications Commission (February 22, 2000) at Appendix 1 [hereinafter *NCTA/CEA Feb.2, 2000 Letter*].

²⁶ 47 C.F.R. § 15.118.

B. Program and System Information Protocol (PSIP)

While the CEA-NCTA RF interconnection agreement²⁷ is complete (even though the standards to implement it are not), the PSIP agreement announced on February 22, 2000²⁸ is not. The two organizations acknowledge this in their agreement by noting that “further work is needed on detailed aspects of the implementation.”²⁹ Thus, before digital “cable ready” receivers can make it to market, this agreement must be completed, the necessary technical standard for implementing it must be adopted and equipment that complies with this standard must be manufactured. Here again, the Commission must establish quick deadlines for completing the standard and implementation.

C. Copy Protection

The affected industries are even farther from completing any agreement on copy protection technology to be used in the digital “cable ready” circumstance. As discussed in Section II, the Commission must force completion of a single standard for copy protection including a prohibition of a blanket ban against use in any particular

²⁷ With respect to the PSIP agreement, NAB and MSTV take strong exception to (1): the limitation of the bandwidth of the PSIP program related bit stream in requirement 3 (because broadcasters’ PSIP data may take more than the approximately ten percent of the A/65 capacity allotted, and the entire broadcast stream should be carried, not a cable-selected part), (2) the special exception for the carriage of the analog TSID (because the operation of the PSIP in the DTV signal should not be tied to an analog signal which may not be present (unless the FCC takes action on mandating A/65)) and (3) possible changing of a broadcasters’ channel number (because NAB and MSTV do not agree that cable systems have the right to re-number/re-brand a broadcaster’s channel). *See NCTA/CEA Feb. 2, 2000 Letter* at Appendix 2. These PSIP content/policy matters should be addressed when the agreement is put out for comment.

²⁸ *NCTA/CEA Feb. 2, 2000 Letter* at Appendix 2.

²⁹ *Id.* at 1.

distribution environment. If the 5C technology does not meet the needs of the content community, then the Commission must force agreement on a practical alternative, but do so with dispatch. This issue cannot be allowed to further delay cable/DTV inter-operability and the DTV transition.

D. Labeling

In order to assure consumers that the digital “cable ready” DTV receivers they purchase will work with digital cable transmissions, the Commission must establish criteria for labeling a DTV receiver as digital “cable ready.” This was appropriate for analog TV sets³⁰ and is likewise appropriate with digital “cable ready” receivers. To ensure consumer confidence that a digital “cable ready” set will work with cable in a variety of real world cable system scenarios, digital “cable ready” receivers should include the IEEE 1394 interface. This is necessary if we are to even approach the 2006 DTV receiver penetration goal for the end of the transition and the recovery of the spectrum. Thus, the Commission must include in the definition of a digital “cable ready” set an IEEE 1394 interface *as well as* standards for RF interconnection, PSIP, and copy protection.

IV. CONCLUSION


The *Notice* in this proceeding asks more questions than it proposes solutions. But the time for asking questions with regard to cable/DTV inter-operability is long past. For the foregoing reasons, NAB and MSTV urge the Commission to immediately require

³⁰ 47 C.F.R. §15.118.

IEEE 1394 on all DTV receivers and digital cable set-top boxes, effective no later than summer 2001. We also urge the Commission to force immediate resolution by the cable and consumer electronics industries on the remaining issues concerning digital "cable ready" receivers and then to proceed to notice, seek comment and adopt forthwith mandatory standards for digital "cable ready" receivers.

Respectfully submitted,

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